D: 38081746 Box 13, Acc. 4, 13-47

Ecosystem Management

BLM Colorado Autumn1994

Ecosystem management is centered around managing ecological systems rather than individual parts while recognizing that humans and their social, economic, and cultural needs are an integral part of ecosystems.

Why did BLM adopt ecosystem management?

As the Bureau of Land Management (BLM) prepares to enter the 21st century, we must make changes to meet new challenges in natural resource management. The future holds new opportunities for natural resource agencies, brought about by:

- new technologies.
- changing global and local economic conditions.
- increasing population pressures.
- new cultural and ethnic demands.
- broadening demands for a clean and healthy environment.

What is ecosystem management?

Ecosystem management is the integration of ecological, economic, and social principles to manage biological systems in a manner that safeguards long-term ecological sustainability. In other words, it is simply a process of people and science working together to restore land health and sustain human welfare.

How is it different from the way BLM manages now?

Ecosystem management is different in many ways. One important difference is that the focus will be on long-term sustainability as a driving force, not short-term productivity. Natural geographic units will be managed for sustainable resource conditions, not for individual resource uses. Ecosystems occur at all levels from local, regional, and national to global. In the past, BLM has focused primarily on managing local environments.

What is adaptive management?

We must reach decisions cooperatively with other landowners and the public, then monitor and evaluate the effects of those decisions. Through monitoring, evaluation, and cooperation with interested parties, both management objectives and actions are revised. This process has been referred to as adaptive management.

Will BLM continue to be a multiple use agency?

Yes. We will continue to need the goods and services produced from the nation's public lands. Managing for healthy ecosystems will promote biological diversity and sustainable development. The Federal Land Policy and Management Act states that we will manage public lands for multiple use and sustained yield. Resource use and protection of the environment can occur in harmony, but perhaps not at the same use levels as in the past.

Comments from the State Director

There's no turning back, nor would we want to. Ecosystem management is now the way we do business. It is a pivotal principle for land and resource management that can protect the environment, provide social and economic stability for communities, extract minerals, and reclaim the land for future uses. This may sound like an oxymoron, but it really is a new way of thinking and acting and we believe it works.

The concept is one that will sell. Acting Director Mike Dombeck said some good, clear things to all of us in a recent memo.

> "We are taking a giant step toward ecosystem management. What this is really about is the health of the land, greener riparian areas, higher water tables, better fishing, a diverse mix of native grasses, increased weight gain in livestock, more song birds, cleaner water, protection of cultural resources, less soil erosion, etc. The bottom line is long term ecological, social, and economic stability. I haven't found anyone who is opposed to this."

BLM Colorado is part of the Colorado Ecosystem Partnership (CEP). I'm pleased with the leadership role the CEP is taking. Our most important contribution is to facilitate change. We are helping to shift the focus from individual programs to whole landscapes.

I'm proud of the strides BLM Colorado is making in ecosystem management. This Fact Sheet talks about some of our endeavors so far. We'll update it periodically as we continue to learn from our experience.

Bob Moore

WHAT'S HAPPENING IN COLORADO. . .

The Colorado Ecosystem Strategy

The Quality Council recently chartered a team whose mission is to develop a strategic plan for achieving ecosystem management. The draft strategy, which will be completed this summer, focuses on the principles of sustainability, collaboration, partnerships, "landscape," science, and adaptive management. The team will ensure that employees in BLM Colorado, as well as in other agencies, have an opportunity to become familiar with its content and offer their input. Broad, informed participation in the development of the plan is essential as we prepare to embark on a new era of natural resource management.

Ecosystem Management Initiatives

Examples of ecosystem management have been popping up all over the state in the past two years. Some of the older efforts were developed out of the Coordinated Resource Management (CRM) process and have taken a new twist. There are many endeavors that are progressing, such as the Owl Mountain Partnership, which is considered one of the best examples of ecosystem management in the West. It was one of 13 case studies presented at the BLM Summit. The Ruby Canyon Ecosystem Management Plan is scheduled for completion by the end of the year, and coordination efforts between the Grand Junction Resource Area and the Grand Resource Area in Moab, Utah, are underway.

Weed Free Forage Program

As we begin to implement ecosystem management in Colorado, we need to consider not only how to restore health, but also how to keep the lands in a healthy condition. Presence of noxious weeds is an easily recognizable symptom of an ecosystem in distress. Region 2 of the Forest Service recently changed its regulations requiring all users of hay, straw, or mulch to use only "certified weed free" products on National Forest lands. Colorado BLM is considering following their lead.

The State of Colorado recently began participating in a regional certified weed free hay program. There are now seven states with weed free hay programs. The states hire inspectors, who check the fields and surrounding areas just before the hay is cut and baled. Colorado currently has over 60 certified inspectors. Weed free hay is baled with a special twine sold only to states with certified weed free hay programs. Interest in the program is expected to grow. Currently, BLM does not require the use of certified weed free products on public lands. Colorado has an opportunity to set a new standard for the Bureau with a revised state policy.

Range Reform

In his statement before the Senate Subcommittee on Public Lands, National Parks and Forests in May, Secretary Bruce Babbitt said that he has spent an extraordinary amount of time seeking new ways to bring westerners together and to find an equilibrium in the form of a strong livestock industry that flourishes within healthy ecosystems.

Among Secretary Babbitt's Rangeland Reform '94 goals are:

- Raise public awareness of range issues and begin discussions about improving the health of the public range.
- Focus recovery efforts on riparian zones.
- Seek specific standards and guidelines needed for resource protection and to communicate to everyone involved what is expected of public land permittees.

Assessing Ecosystem Health

How healthy are our ecosystems in Colorado? How do we come up with a workable answer for this challenging question? At a recent meeting of outdoor sportswriters, Secretary Babbitt said that aquatic resources — streams and fish are the ultimate indicators of ecosystem health. This idea is reflected in BLM's commitment to having 75 percent of all our riparian areas in proper functioning condition by 1997.

Dr. Walter Whitford, collaborating scientist with the Environmental Protection Agency's Ecological Health Initiative, says that assessing ecological health is like assessing human health. Physicians look at many symptoms and take both quantitative and qualitative measurements in diagnosing what is wrong. We need to take a similar approach when assessing ecosystem health at a local level. We need to look at factors such as erosion rates, water quality and quantity, and the presence of invasive exotic species.

We need to use the latest or best science in quantitative measurements, and continue using our best professional judgment in qualitative measurements. We cannot just treat the symptoms if we want to find a long-term solution to maintaining healthy ecosystems.

Regional Ecosystem Health

In promoting ecosystem health we need to look beyond our local boundaries to a more regional scale. Determining ecosystem health at the regional level is more difficult than at the local level. Our challenge is to understand the healthy regime for each system we manage.

The Colorado Ecosystem Partnership

The Colorado Ecosystem Partnership is governments, citizens, and scientists working together to achieve resource management and protection that is ecologically sustainable, economically feasible, and socially acceptable.

GOALS

1. Create an environment in Colorado for success in ecosystem management at the community level.

Objectives

- Change attitudes and behavior at all levels toward working together in true partnership in resource planning and management.
- Encourage community based, community led environmental stewardship consistent with national and state interest.
- Use ecosystem management as a framework for promoting environmental awareness.
- Recognize and share successes.

2. Work together to support community efforts in ecosystem management.

Objectives

- Provide information to communities that will help advance partnerships.
- Pool energies and capabilities to better understand ecosystems.

CURRENT MEMBERSHIP

Federal

Bureau of Land Management
Forest Service
Fish and Wildlife Service
National Park Service
Bureau of Reclamation
Environmental Protection Agency
Soil Conservation Service

State

Department of Natural Resources
Division of Parks and Outdoor Recreation
Division of Wildlife
State Forest Service
Department of Agriculture
State Land Board
Department of Local Affairs

Membership is open and will continue to grow as more agencies, groups, and communities see the value of working together for common goals.

Even though the agencies and interested parties bring different viewpoints to the partnership, their work shares numerous common themes.

- Use a systems perspective.
- Recognize that people are a part of nature, not apart from nature.
- Think about connections, not boundaries.
- Acknowledge that local communities are the key.
- Manage for ecological integrity.
- Use adaptive management and management systems.
- Collect data cooperatively.